



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/612,829	07/07/2000	Howard Gregg King	4396D1	8746

22896 7590 12/02/2004

MILA KASAN, PATENT DEPT.
APPLIED BIOSYSTEMS
850 LINCOLN CENTRE DRIVE
FOSTER CITY, CA 94404

EXAMINER

BARTON, JEFFREY THOMAS

ART UNIT	PAPER NUMBER
----------	--------------

1753

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/612,829

Applicant(s)

KING ET AL.

Examiner

Jeffrey T. Barton

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040308, 20000828.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☒ Other: Prov. App. 60/058,798.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Page 3 of the non-entered amendment filed 22 July 2004, with respect to the rejection(s) of claim(s) 14-17 under 35 U.S.C. §102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new grounds of rejection were found and are put forth below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 14-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Adourian et al.

Regarding claim 14, Adourian et al disclose a method for sample handling in a capillary electrophoresis apparatus, comprising: providing a plurality of samples on coordinates of a work surface (Figure 4, plates 104), wherein the

Art Unit: 1753

work surface temperature is controlled (shown in sample preparation, Column 21, lines 28-49); simultaneously transferring at least two samples from their respective work-surface coordinates to respective loading wells of a capillary electrophoresis chip (Column 11, lines 4-7), wherein the wells include a capillary positioned therein (e.g. Figure 8A, capillary at the bottom of the well); and injecting the samples from the wells into the capillaries. (Column 22, lines 26-50)

Regarding claim 15, Adourian et al disclose the work surfaces being multiwell plates, with the sample coordinates defined by the wells. (Column 8, lines 61-63)

Regarding claim 16, the loading wells of Adourian et al can be referred to as being in a sample loading assembly. (e.g. Figure 4, several plates 104, wash station 98, chips 32, and pipetter can be considered parts of a "loading assembly")

Regarding claim 17, Adourian et al disclose electrokinetic injection. (Figures 8A and 8B)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1753

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kambara et al (US 5,968,331) in view of Lauer et al.

Relevant to claim 14, Kambara et al disclose a method for sample handling in a capillary electrophoresis apparatus, comprising: providing a plurality of samples on coordinates of a work surface (Column 4, line 66 -

Art Unit: 1753

Column 5, line 1; Column 5, lines 52-58); simultaneously transferring at least two samples from their respective work-surface coordinates to respective loading wells of a capillary electrophoresis chip (Figure 8, wells 23; Column 9, lines 24-29), wherein the wells include a capillary positioned therein (e.g. Figure 9, capillary at the bottom of the well); and injecting the samples from the wells into the capillaries. (Column 9, lines 24-29)

Relevant to claim 15, Kambara et al disclose the work surfaces being multiwell plates, with the sample coordinates defined by the wells. (Column 5, lines 52-58)

Relevant to claim 16, the loading wells of Kambara et al can be referred to as being in a sample loading assembly. (e.g. Figure 8, illustrated plates, loading capillaries, and wells can be considered parts of a "loading assembly")

Relevant to claim 17, Kambara et al disclose electrokinetic injection. (Column 9, lines 26-29)

Kambara et al do not explicitly disclose temperature control of the work surface.

Lauer et al disclose a capillary electrophoresis device in which all components are contained in a temperature-controlled enclosure, including the sample plate. Lauer et al teach the advantages of maintaining a constant temperature throughout the system in order to maximize reproducibility. (Figure 1; Column 5, lines 21-37)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Kambara et al by

Art Unit: 1753

performing the method in an apparatus wherein the temperature of the system (including the work surface) is controlled, as taught by Lauer et al, because Lauer teaches that maintaining a constant temperature throughout the system improves reproducibility.

8. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Briggs et al in view of Lauer et al.

Relevant to claim 14, Briggs et al disclose a method for sample handling in a capillary electrophoresis apparatus, comprising: providing a plurality of samples on coordinates of a work surface (Figure 4A, titer plate 86; Column 10, lines 24-25); simultaneously transferring at least two samples from their respective work-surface coordinates to respective loading wells, (Figure 4A, Column 5, lines 8-14), wherein the wells include a capillary positioned therein (Figures 1, 2, and 4C); and injecting the samples from the wells into the capillaries. (Column 8, lines 9-24)

Relevant to claim 15, Briggs et al disclose the work surfaces being multiwell plates, with the sample coordinates defined by the wells. (Figure 4A)

Relevant to claim 16, the loading wells of Briggs et al can be referred to as being in a sample loading assembly. (e.g. Figures 4A and 4B, plates, capillaries, and wells 74 can be considered parts of a "loading assembly")

Relevant to claim 17, Briggs et al disclose electrokinetic injection. (Column 8, lines 9-24)

Briggs et al do not explicitly disclose temperature control of the work surface.

Lauer et al disclose a capillary electrophoresis device in which all components are contained in a temperature-controlled enclosure, including the sample plate. Furthermore, Lauer et al teach the advantages of maintaining a constant temperature throughout the system in order to maximize reproducibility. (Figure 1; Column 5, lines 21-37)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Briggs et al by performing the method in an apparatus wherein the temperature of the system (including the work surface) is controlled, as taught by Lauer et al, because Lauer teaches that maintaining a constant temperature throughout the system improves reproducibility.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory

Art Unit: 1753

period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Jeffrey Barton, whose telephone number is (571) 272-1307. The examiner can normally be reached Monday-Friday from 8:30 am – 5:00 pm.

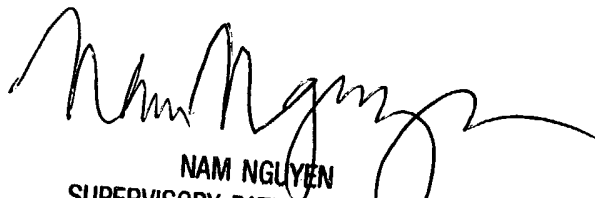
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached at (571) 272-1342. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

Art Unit: 1753

JTB

November 29, 2004



NAM NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700